

A B S T R A C T

In the invention, the atmosphere in a process chamber is conditioned using a primary pump, a secondary pump, speed control means for controlling the speed of the primary pump, and at least first gas analyzer means adapted for analyzing the extracted gases upstream from the primary pump and for producing first analysis signals. First signal processing means control the pumping speed as a function of the first analysis signals, so as to determine the variation in the pressure inside the process chamber during the transient stages of the treatment. In this way, deposits and turbulence are avoided in the process chamber, as are deposits in the pumping line, so that the secondary pump can be placed in the immediate vicinity of the process chamber.